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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,108	06/25/2003	Kazushi Ogawa	075834.00420	4208
33448	7590	08/28/2007	EXAMINER	
ROBERT J. DEPKE			RENNER, CRAIG A.	
LEWIS T. STEADMAN				
ROCKEY, DEPKE & LYONS, LLC			ART UNIT	
SUITE 5450 SEARS TOWER			PAPER NUMBER	
CHICAGO, IL 60606-6306			2627	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/606,108	<b>Applicant(s)</b> OGAWA ET AL.	
	<b>Examiner</b> Craig A. Renner	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following is suggested:

--HELICAL SCAN MAGNETIC HEAD WITH AUXILIARY MEMBER AND WITH  
COIL LONGER SIDE BETWEEN MAGNETIC CORE WIDENED PORTIONS--.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gibson (US 4,191,983).

Gibson (US 4,191,983) teaches a magnetic head assembly (Figs 1(a-d) and 2(a-f), for instance) comprising a magnetic recording head (as shown in Fig. 2f, for instance), having a leading side and a trailing side relative to the traveling direction of a magnetic recording medium (lines 47-50 in column 4, for instance) and fabricated in a thin film forming process (lines 45-47 in column 4, for instance), at least one auxiliary member (60) adhered to either the leading side

or the trailing side of the magnetic recording head (as shown in Fig. 2b, for instance), the magnetic recording head including a substrate (10), a first magnetic core (12) formed above the substrate (as shown in Fig. 1b, for instance) and having a front end portion (as shown in Fig. 2c, for instance), a second magnetic core (26) formed above the substrate (as shown in Fig. 1c, for instance) and having a front end portion (as shown in Fig. 2c, for instance) and a back end portion (as shown in Fig. 1c, for instance), the back end portion being connected to the first magnetic core (as shown in Fig. 1c, for instance), a magnetic gap (30) of predetermined thickness provided between the front end portion of the first magnetic core and the front end portion of the second magnetic core (as shown in Figs. 1c and 2c, for instance), a coil (18) having a portion disposed between the first magnetic core and the second magnetic core (as shown in Fig. 1d, for instance) for developing a magnetic flux between the front end portions of the first and second magnetic cores, wherein a width of the second magnetic core at the front end portion thereof is equal to or smaller than a width of the first magnetic core (as shown in Fig. 2c, for instance); and wherein the first magnetic core and the second magnetic core each has a narrow region located nearest to the recording medium (as shown in Figs. 1d and 2c, for instance) and a widening portion wherein the width of the cores each increases (as shown in Figs. 1d and 2c, for instance), the first magnetic core and the second magnetic core each has a widened portion that is substantially wider than the region located nearest the recording medium (as shown in Figs. 1d and 2c, for instance) and which is adjacent the widening portions (as shown in Figs. 1d

Art Unit: 2627

and 2c, for instance) and the coil portion is located between the first and second magnetic cores only at the widened portions of the first and second magnetic cores (as shown in Figs. 1d and 2c, for instance), the widened portions having a generally constant width at the location of the coil portion (as shown in Figs. 1d and 2c, for instance), and further wherein the portion of the coil between the widened portions of the magnetic cores is at a longer side of the coil (as shown in Figs. 1d and 2c, for instance), the coil having both longer and shorter sides (as shown in Fig. 1d, for instance). Gibson (US 4,191,983), however, remains silent as to the magnetic recording head being "mounted in a helical scan drive."

Official notice is taken of the fact that it is notoriously old and well known to mount a magnetic recording head in a helical scan drive in the same field of endeavor for the purpose of enabling video tape recording in a video tape recorder. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have had the magnetic recording head of Gibson (US 4,191,983) be mounted in a helical scan drive. The rationale is as follows:

One of ordinary skill in the art would have been motivated to have had the magnetic recording head of Gibson (US 4,191,983) be mounted in a helical scan drive since such enables video tape recording in a video tape recorder.

#### ***Pertinent Prior Art***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Bischoff (US 5,173,826), Sasaki (JP 60-

059513), Yamada et al. (JP 63-311615), and Katahashi et al. (JP 04-195809), which each individually teaches a magnetic head assembly with a portion of a coil between widened portions of magnetic cores being at a longer side of the coil.

### ***Response to Arguments***

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2627

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Tuesday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Craig A. Renner  
Primary Examiner  
Art Unit 2627

CAR